

# MISSOURI. Conservationist

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# Solid Foundation

A new year is upon us. As I look out the front window, the sun is just beginning to brighten the horizon. I have elected to start the day at an old farm house in Moniteau County, often used as my

hunting cabin, gathering place or remote work location. The morning air, still and crisp, allows the cackles from a flock of wild turkeys to stimulate my thoughts. While considered a common species today, not all that long ago, wild turkeys were absent from many parts of our state. What opportunities will unfold for Missouri conservation in the future?

I find myself both humbled and excited to serve as your next director of the Conservation Department. Missouri's citizen-led conservation program is something special—something citizens should feel good about and value. For more than 73 years, the Department has responded to the concerns of rural and urban citizens, increased wildlife abundance, ensured forest health, protected at-risk ecosystems and taught conservation ethics to thousands of citizens. These successes are not by accident or chance. Generations of Missourians have demonstrated a passion for the outdoors, recognizing the many values forest, fish and wildlife resources provide at the individual, family, community and state levels.

Many Missourians have labored to establish and protect a management system that provides the Conservation Commission authority to make science-based resource decisions, focused on fulfilling citizens' expectations for healthy and sustainable resources. In addition, Missouri's conservation efforts have a broad management base, supported with dedicated funding, giving consideration to forests, fish and all species of wildlife. These facts are the foundation of Missouri's conservation system of governance—a system held up as the model by people around the world.

As we head into the future, our state's conservation success

depends on continued citizen support—the cornerstone of Missouri's conservation experience. I find comfort in the fact that the Department and citizens, working as a team, will continue building on past successes and advance Missouri as a national leader in forest, fish and wildlife management. I have much confidence in Missouri's citizens and the Department's quality staff.

Today's changing natural resource needs, technological advancements, economic conditions, and desires/needs of citizens require that we continue to review and refine existing processes and strategies while standing firm on conservation principles. Our mandate and responsibility to manage forest, fish and wildlife resources remains important and consistent.

An openness to adaptive learning and creative thinking will be essential as we build on conservation education, research and management, citizen input and partnerships, and solid staff—four pillars or areas of key importance. Focusing on these areas will help encourage, create and expand a conservation commitment and vision among individuals across the state that will guide future generations.

I look forward to hearing from citizens—you are a critically important part of the team. As we look to the future, a continued commitment to quality service, accountability and positive results for forest, fish and wildlife resources will guide your Missouri Department of Conservation.



Robert L. Ziehmer, director

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**OUR MISSION:** *To protect and manage the fish, forest and wildlife resources of the state; to serve the public and facilitate their participation in resource management activities; and to provide opportunity for all citizens to use, enjoy and learn about fish, forest and wildlife resources.*

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Cover: Castor Shut-Ins by Jim Rathert  
Left: Painted Rock by David Stonner  
Find more images like these to inspire you  
to explore the outdoors in David Stonner's  
article *Three Gems* beginning on Page 8.

### NextGEN

This section reports on goals established  
in *The Next Generation of Conservation*.  
To read more about this plan, visit  
[www.MissouriConservation.org/12843](http://www.MissouriConservation.org/12843).

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## DEER GRANDPA

For many years I have told the story that my grandpa helped biologists invent the white tail deer and wild turkey traps, and that he helped to introduce these species to other states in the country. Much to my family's surprise, there he was on Page 8 of November's issue (in the front, releasing a deer). His name was Ray Woodring and he lived in Willow Springs.

To a young girl, he was just grandpa in a green suit and hat who drove a truck with "Missouri Conservation" on it. As a woman, I have learned the tremendous value of the role he played in the "evolution of deer management."

Thank you so much for proving my story true!

*Lea Ann Payne, Ozark*

When I reached Page 8, I got a proud surprise. The man under the "Deer Season Closed" sign is my grandfather, Ray Woodring.

Occasionally, my grandfather would take me out to the refuge. We would bait the area where he planned to catch and tag turkeys. We would

spread cracked corn near the blind and he would show me the signs that were all about from the deer and turkey.

My grandmother told me that she and grandpa took some deer to a rural Missouri town, about the time this picture was taken, where several people had gathered to watch the release. Apparently deer were so sparse that many had never seen one. As I have been the recipient of the Commission's hard work and good management, I am proud of my grandfather's contribution to the healthy deer and turkey populations here in Missouri.

*Mark Doyle, via Internet*

## TROPHY DEER CARE

I disagree with reader Mike Billman [*Careful dresser*; December]. In the "Letters" section, he wrote that he opposed splitting the pelvis when field dressing a deer due to possible broken knife blades or possible personal injury. I split the pelvis of every deer I harvest.

I always have a hatchet and a hammer readily available for use after downing a deer. I lay the deer on its back and then create tension in the meat above the center of the pelvis by placing my knee on one leg and my right hand on the other, spreading the legs apart. Then, with the left hand, I barely have to touch the sharp edge of the knife to the meat and it easily splits all the way to the bone. Next, release the leg in the right hand. Keep the knee on the left leg, place the cutting edge of the hatchet onto the center of the exposed pelvic bone and use the hammer to drive the head of the hatchet through the bone.

By not chopping or slicing with the hatchet, merely using it as a cutting wedge, it will not puncture the intestines beneath the pelvic bone. It only takes a few mild licks with the hammer to break through the bone. Removal of the lower colon and anus is then very simple by cutting around the anus and then lifting the colon and rectum out through the split created in the pelvic bone.

*Greg Rudroff, Farmington*



## Reader Photo

## GONE WITH A WHIFF

Leo Cachat of Bonne Terre captured this image of an armadillo foraging along a roadside in St. Mary's last winter. "When I spotted him, I parked and ran across and up the road to get in front of him so the wind would be coming at me," Cachat says. "Well, he came right up to me and went right by me. When he got past me my scent caught his nose, and he went on up the road and ran into a drainpipe."

## CORRECTIONS

Some of our readers were concerned that the article *Oh Christmas Tree!* (December; Page 6) favored artificial trees. This was not our intention. Though real trees may not be appropriate for all families, they are a valuable economic and conservation resource for Missouri—especially when they are recycled.

In the December "Ask the Ombudsman" column, we wrote that a special permit is required to shoot nuisance crows out of season. However, due to a federal exception, a special permit is not required to control crows when causing damage, or when concentrated in such numbers and manner as to constitute a health hazard or other nuisance. In those instances Missouri's *Wildlife Code* allows property owners to control the problem without a permit by contacting a Department representative within 24 hours.

In the November issue, on Page 33, the Web site for Share the Harvest should have been listed as [www.MissouriConservation.org/9032](http://www.MissouriConservation.org/9032).





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Kids' site (beginning February 2010):  
[www.XplorMo.org](http://www.XplorMo.org)  
MDC Web site: [www.MissouriConservation.org](http://www.MissouriConservation.org)

Missouri Conservationist Web site:  
[www.MissouriConservation.org/3939](http://www.MissouriConservation.org/3939)  
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**XPLOR** will ignite children's curiosity unlike any other nature magazine. Six times a year we'll bring you eye-popping art, photos and stories about Missouri's coolest critters, niftiest natural places, liveliest outdoor activities and people who've made a living in the wild. Don't keep the door closed another minute. Come outside with us and **XPLOR!**

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(From left) Gov. Jay Nixon, Executive Director of the Missouri Conservation Federation Dave Murphy and Protection Regional Supervisor for the Department of Conservation Gary Cravens in the West Plains food pantry.

## Governor Shares His Harvest

Just before the opening of the November portion of firearms deer season, Gov. Nixon launched a campaign to increase dramatically the amount of venison donated to needy families through Missouri's Share the Harvest program. He made stops in Ashland, St. Louis, Sedalia, Springfield and Kirksville to encourage hunters to donate meat to local food pantries.

A few days later, he demonstrated his personal commitment to the effort by shooting a white-tailed deer doe in Pulaski County and taking it to Steve-n-Sons Custom Meat Processing in Newburg, one of 125 approved Share the Harvest processors. He and his wife, Georganne, also lent a hand unloading 250 pounds of venison donated to the First Baptist Church Food Pantry in West Plains.

With encouragement from Gov. Nixon, the Missouri Department of Economic Development has approved approximately \$200,000 in Neighborhood Assistance Program incentive money to help pay for processing hunter-donated deer. The governor hopes this and other efforts will increase venison donations from the current level of about 265,000 pounds to more than 450,000 pounds annually over the next three years.

## Antlerless Harvest Tops 22,000

Excellent hunting conditions enabled Missouri hunters to shoot 22,151 deer during the antlerless portion of firearms deer season Nov. 25 through Dec. 6. The strong showing during the antlerless hunt puts hunters on track to match or exceed last year's total firearms deer harvest.

The 12-day antlerless hunt began the day after the November portion of firearms deer season closed. The harvest during the antlerless season topped last year's by more than 7,000. Resource Scientist Lonnie Hansen with the Missouri Department of Conservation attributed the hefty antlerless harvest to favorable weather and hunters' desire to provide venison for the coming year.

"Heavy rainfall on opening weekend held down the harvest during the November firearms hunt," says Hansen. "I think a lot of hunters went into the antlerless season wanting to shoot does for their freezers. The numbers make it clear they succeeded."

Hansen noted that weather during the antlerless season was generally cool and dry. The temperature dropped into the teens during the final weekend of the season, which probably helped hunters.

"Deer tend to move around more looking for food during cold weather," he says. "That makes them more visible."

Hunters checked approximately 8,000 deer during the second weekend of the antlerless season, boosting the number of deer taken by firearms hunters this year to 229,876.



Top counties during the antlerless hunt were Benton with 772 deer checked, Morgan with 694 and Callaway with 652. The Conservation Department received no reports

of firearms-related deer-hunting incidents during the antlerless season. The final portion of firearms deer season is the youth hunt Jan. 2 and 3.

## Natural Resources Conference

Resource-management professionals who attend the Missouri Natural Resources Conference (MNRC) will learn how to take risks that help



them meet challenges, grow and learn.

The conference takes place Feb. 3 through 5 at Tan-Tar-A Resort at Lake of the Ozarks. Michael Fraidenburg, author of *Intelligent Courage: Natural Resource Careers That Make a Difference*, will open the conference. Ben Garber, management consultant and Theodore Roosevelt reenactor, will discuss compelling leadership principles, strategies and actions. Twenty-two additional workshops round out the conference.

The MNRC is an annual meeting organized by natural resource professional societies. It

provides a forum for established and aspiring natural-resource professionals to exchange information and ideas and enhance cooperation among government agencies and citizen conservation organizations.

Early-bird registration must be postmarked by Jan. 6. Registration forms and further information are available at [www.mnrc.org](http://www.mnrc.org).

## Help Solve Goose Problems

GeesePeace St. Louis is offering workshops to promote non-lethal ways of dealing with prob-

lem Canada geese.

The workshops, co-sponsored by the Conservation Department, the Wildlife Rescue Center and the Humane Society of Missouri, promote an integrated approach to managing goose



(continued on bottom of Page 6)



## ASK THE OMBUDSMAN

**Q:** Why does quail season end in the middle of January?

Some other states allow quail hunting through January or even into mid-February.

**A:** Harvest of quail in January or February has a greater

effect on reducing the number of breeding quail than harvest earlier in the season.

In Missouri, natural mortality (predation, exposure to weather, etc.) increases in January and continues at a high level through the winter. Available food and cover is diminished and energy losses due to harassment can result in higher mortality. We set the quail season to allow most

of the harvest to occur in November and December, when hunting is less likely to impact the next breeding season. The key to more quail is suitable habitat plus good production and survival of young in the spring.

**Q:** My friends and I are avid fish giggers. During the winter, we hardly ever see Asian carp or common carp in the lower Gasconade River. Where do they go during the winter?



Bobwhite quail

**A:** The Gasconade River is not ideal for Asian carp, nor for common carp, at any time of the year due to its fast flow rate, low fertility and clear water. The carps' lower metabolism in the winter makes faster currents even less attractive. Several studies have shown that carp tend to move downstream in the fall and overwinter in deeper holes like the ones you find behind dikes or at the mouths of larger tributaries to the Missouri River. Carp in the lower Gasconade may leave that river each fall and become less active in deep holes in the Missouri River. Asian carp will remain more active during the winter than common carp.



Fish giggering

Ombudsman Tim Smith will respond to your questions, suggestions or complaints concerning Department of Conservation programs. Write him at PO Box 180, Jefferson City, MO 65102-0180, call him at 573-522-4115, ext. 3848, or e-mail him at [Ombudsman@mdc.mo.gov](mailto:Ombudsman@mdc.mo.gov).



## New Director Robert L. Ziehmer

The Missouri Conservation Commission has chosen Robert L. (Bob) Ziehmer as the eight director of the Missouri Department of Conservation in the agency's 73-year history. Starting Jan. 15, he will replace John D. Hoskins, who has been director since July 2002.

Ziehmer, 42, is a native of California, Mo., where he currently lives with his wife, Beth, and their daughters, Emily, 14, and Lauren, 11.

"I am both humbled and excited by this opportunity the commission has entrusted to me," says Ziehmer. "This is a huge event for my family and me."

Ziehmer says one of his top priorities as director will be maintaining the citizen confidence and support that have made Missouri a national conservation leader. "We need to have open dialog with Missourians about important issues," he says. "I welcome that. Citizen input and involvement are critical to conservation."

problems. This includes landscaping, no-feeding policies, population stabilization techniques and ways of discouraging geese from frequenting homes, businesses, parks, golf courses and other areas. Four workshops are scheduled for Feb. 6, 8, 16 and 26 at locations in the St. Louis area.

For more information, visit [www.geesepeacestlouis.org](http://www.geesepeacestlouis.org), or contact GeesePeace St. Louis, PO Box 6246, Chesterfield, MO 63006-6246, phone 314-567-2081.

## Zebra Mussels in Kansas City Area

The confirmation of zebra mussels in a Jackson County lake raises the question of where the invasive mollusk will turn up next. For boaters and anglers, it also raises the question of what they can do to prevent spreading the pest to new areas.

In October, residents of Lake Lotawana, a private residential development, notified the Missouri Department of Conservation they had found what they thought were zebra mussels

on the propeller of a boat in the lake. The owner said the boat had never left Lake Lotawana. Conservation workers confirmed the animals were zebra mussels. The largest measured approximately .33 inches long.

This is bad news for residents of Lake Lotawana and for Missouri. In addition to the ecological and economic damage these prolific invaders can cause, the existence of another zebra mussel infestation in Missouri increases the chances it will spread from Lake Lotawana, if it hasn't already.

Previously, zebra mussels had been found in the Mississippi, Missouri, Osage, White and Meramec river drainages. Lake Lotawana is in the watershed of Sni-A-Bar Creek, a Missouri River tributary.

Lake of the Ozarks, where zebra mussels were discovered in 2006, already has a burgeoning population of the mollusks. Zebra mussels have been found in Lake Taneycomo, and they were detected last summer in Pomme de Terre Lake.

Zebra mussels compete with native mussels, larval fish and other animals for food, making them a potential threat to the Show-Me State's lucrative sport-fishing industry. Their habit of attaching themselves to any solid object dooms native mussels, which are smothered by dense encrustations of the invaders.

Missourians can avoid spreading zebra mussels with simple preventive measures. These include the following precautions:

- **Inspect**—Visually inspect boats, trailers, ropes, minnow buckets and anything else that was in the water after each use. Zebra mussels are fingernail-sized with dark and light stripes. Small zebra mussels give hard surfaces a sandpaper feel. Report any suspected zebra mussels to the nearest Conservation Department office.

- **Clean**—Remove all plants, animals and mud, and thoroughly wash everything, especially live wells, crevices and other hidden areas. Wash boat bilges, trailers, motor drive units and live wells with hot water at least 104 degrees. Most commercial car washers meet this standard.





## Staff Changes Help MDC Adapt to Economic Downturn

The Conservation Department is reducing its staff to keep personnel costs in balance with other expenditures and enable the agency to live within its financial means.

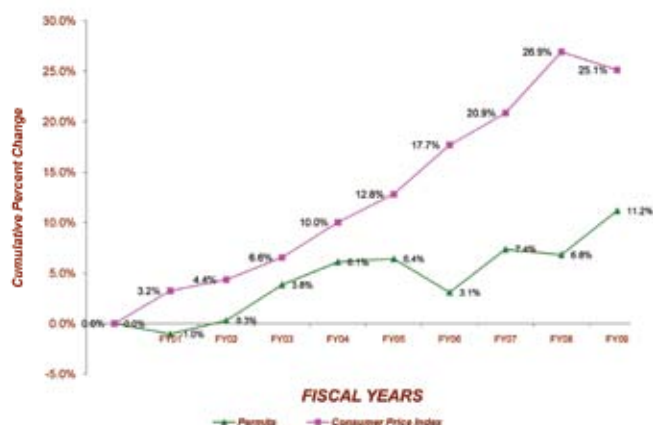
The Conservation Department's budget represents less than 1 percent of Missouri's total state government budget. Nearly 80 percent of the agency's money comes from hunting and fishing permit sales and the one-eighth of 1 percent conservation sales tax.

- From FY 2000 through FY 2009, hunting and fishing permit sales grew less than the rate of inflation by 13.9 percent, or -\$4.0 million.
- From FY 2000 through FY 2009, conservation sales tax revenue grew less than the rate of inflation by 14.0 percent, or -\$12.1 million.
- Between FY 2008 and FY 2009 alone, conservation sales tax revenue dropped \$6.4 million, the largest one-year decline in history, and the first time sales-tax revenue decreased two years in a row.

Budget cuts were needed to compensate for these continuing revenue declines. In August, the Conservation Commission approved staff reductions that maintain a balance between personnel and program expenditures.

Most of the savings will come from not filling vacant positions. The Department had held 39 full-time positions vacant since early 2009. It expects

Permits vs Consumer Price Index - FY00 to FY09



another 134 vacancies this year from retirements and position reductions. The total of 173 vacant positions represents 10.7 percent of Department staff and will yield annual savings of approximately \$7.5 million.

Budget cuts will affect some Conservation Department facilities and services. For example, some field offices will be merged with others for greater efficiency, and hours of operation at nature centers will be reduced. But by reducing expenses now, the Conservation Department avoids a crisis situation and better positions conservation in Missouri for the future.

- Drain—Eliminate all water before leaving the area, including live wells, bilge and engine cooling water.

- Dry—Allow boats and other equipment to dry in the sun at least five days before launching in other waters.

- Dispose—Put unused bait in a plastic bag and dispose of it in the trash.

More information about invasive aquatic species prevention is available at [www.invasive-speciesinfo.gov/aquatics/main.shtml](http://www.invasive-speciesinfo.gov/aquatics/main.shtml).

## Record Brown Trout

For Scott Sandusky, the most exciting fish in the world is the Missouri state-record brown trout he landed Nov. 20. For the rest of us, the most exciting fish are the even bigger brown trout that might still be prowling the depths of Lake Taneycomo.

Sandusky, a 49-year-old resident of Arnold, caught his 28-pound, 12-ounce fish on Berkley Power Bait and 4-pound-test line on a spinning rod and reel. The fish, which bore some resem-

blance to a football, bested the previous record—another Taneycomo fish—by more than a pound. It measured 37 inches from nose to tail.

Sandusky's catch is dwarfed by the world record brown trout, caught from Michigan's Big Manistee River Sept. 9. That fish weighed 41 pounds, 7 ounces. However, the Missouri Department of Conservation says Lake Taneycomo could harbor even bigger brown trout.

In September 1997, a Lake Taneycomo angler found a monster brown trout dead near the lake's 18-mile marker. The fish measured 41.75 inches long. Some estimated its live weight at 45 pounds. That fish could have been a world record.

The lake's natural food base is phenomenal, and it has an abundance of deep-water habitat that can hide big fish. Furthermore, Lake Taneycomo's slow-moving current

allows big trout to grow rapidly because they don't have to expend much energy.

In contrast, anglers are likely to expend lots of energy looking for big browns at Lake Taneycomo, spurred on by Sandusky's success.



Scott Sandusky with his Missouri state-record brown trout he landed Nov. 20.







# Three Gems

Amidon, Pickle Springs and Hickory Canyons are this photographer's top picks of southeast Missouri.

by DAVID STONNER

◀ **WINTER AT AMIDON SHUT-INS**  
The subtle interplay of shadow and light on the granite boulders and chutes enthralls on a cold January day.

📷 24-70mm f/2.8 lens with polarizing filter  
f/22 • 3.2 sec • ISO 100



# I

I consider Pickle Springs, Hickory Canyons and the Castor River Shut-Ins to be the jewels of southeast Missouri. They don't have the grand vistas sweeping from horizon to horizon, thundering waterfalls or vertigo-inducing cliffs of the nearby St. Francois Mountains. These places are small. Intimate. Quiet. Lovely to behold.

These are breathtaking places that can speak to a person. I've taken hundreds of photos of these areas and feel that I've only just begun to explore them. There isn't a bad time of year to hike the trails. Spring rains bring vibrant emerald color to the trees and the streams run white with foaming water. The cool shade and moist dripping rock of the box canyons give welcome relief during sultry summer days of watching birds and insects go about their business. Autumn beckons with a show of color that rivals most in brilliance. Stark winter mornings of biting, clawing wind give way to evenings of sun-warmed granite and sandstone as the days slip quietly back into spring.

I find myself returning again and again. When passing through the area on other business, I make it a point to stop at one of these areas. Sometimes, when the photography conditions are poor, I'll just sit and listen to the water tumbling through rock chutes. I watch the breeze rustle boughs of oak, maple and ash. I inhale the earthy smell of duff-covered forest floor and the dry, heady scent of pine wafting over warm rock.

It is my hope that these images will inspire you, too, to explore these gems further. ▲







## ◀ AMIDON'S SUMMER SHOW

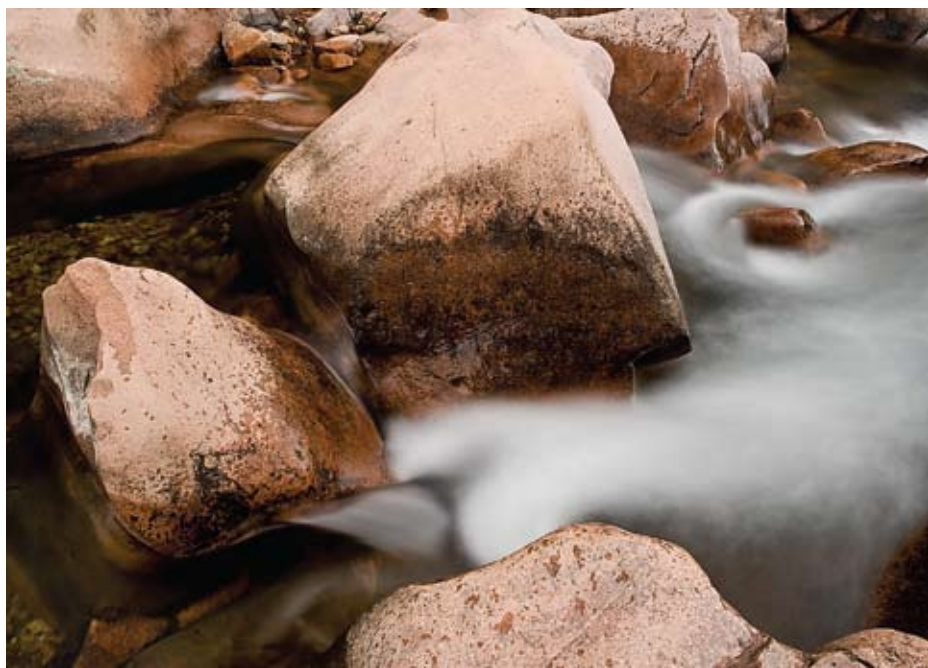
The water flow in the Castor River Shut-Ins slows quite a bit during the late days of summer, revealing pockets of glass-smooth rock that are submerged most of the year. Shallow granite bowls make comfortable places to sit while toes dabble in the cold rushing water.

📷 16-35mm f/2.8 lens • f/22 • 1.6 sec • ISO 100

## ▼ BOULDERS

Calm pools tumble through granite-lined chutes for nearly ¼ mile before slowing again in the boulder-strewn river. A mile-long loop trail follows the river before climbing from the gorge to explore restored glades and woodland habitat. The trails pass through some rugged terrain in places, so good shoes and a bottle of water are necessities.

📷 24-70mm f/2.8 lens with polarizing filter • f/16 • 6 sec • ISO 100







## PICKLE SPRINGS WATERFALL ►

A small trickle of water caresses sandstone, moss and fern at Pickle Springs.

The area contains a headwaters stream and the moist canyons and creeks sustain a wide variety of flora. One appealing aspect beyond the beauty is the accessibility. Amidon, Pickle Springs and Hickory Canyon are within 35 miles of each other and consist of a loop trail not more than a couple of miles in length.

📷 16-35mm f/2.8 lens • f/9 • .5 sec • ISO 400







### ▲ A TRAIL THROUGH TIME

The Pickle Springs Trail Through Time is a 2-mile loop that passes through woodlands, glades and sandstone arches. One of the most rewarding views is as the trail emerges from a stand of pine for a bluff-top view of the 256-acre natural area. I waited until the morning sun began to bathe the surrounding hills in warmth. This image is a composite of seven single frames digitally stitched together for a panorama effect.

📷 24-70mm f/2.8 lens • f/8 • 1/8sec • ISO 200

### ◀ PINE ROOTS

Shortleaf pines cling tenaciously to sandstone boulders in the arid heights of Pickle Springs.

📷 24-70mm f/2.8 lens • f/8 • 1/15 sec • ISO 200









## ◀ HICKORY CANYONS

Hickory Canyons Natural Area is not far from Pickle Springs in Ste. Genevieve County. The box canyons are a stunning focal point, with a mile-long loop trail winding through a sandstone forest dominated by oak and maple with shortleaf pine clinging to ridge tops and dry cliff walls.

📷 16-35mm f/2.8 lens • f/13 • 25 sec • ISO 400



## ▲ AUTUMN SWIRL

Remnants of autumn swirl in mesmerizing patterns in the slow waters of a scenic trail side creek at Hickory Canyons. I sat for an hour watching and photographing while listening as squirrels and birds made ready for the quickly approaching winter.

📷 70-200mm f/2.8 lens • f/4 • 1/60 sec • ISO 200



## ◀ MAPLE AND PINE

A glowing sugar maple makes for a nice contrast at Hickory Canyons on a steep ridge overlooking a box canyon on one side and mesic sandstone forest on the other. It is easy to see Amidon, Pickle Springs and Hickory Canyons in a day, with plenty of camping in several state parks or lodging in nearby towns.

📷 24-70mm f/2.8 lens • f/4 • 1/100 sec • ISO 200





On a trapping outing, Jeff Kitchen, armed with chest waders, carries his son, Lee, across a portion of a creek on Toronto Springs Conservation Area near Camdenton that was too deep for Lee's boots. Jeff says this task was much easier when he first started trapping six years ago, when Lee was only 5.





# First Year **FUR** **TRAPPER**

Lessons learned and earned in the field.

*by* JEFF KITCHEN, *photos by* DAVID STONNER



**I'M NOT SURE WHAT CAUSES** a grown man to try something completely new. Perhaps it's a chance to feel young again, optimistic and green. Maybe it's the joy of discovery, or the excitement of exploring a new world. I did just that when I became a first-year fur trapper at the age of 34.

The idea of fur trapping always appealed to me when I was a kid. I would read stories in *Fur-Fish-Game* of Alaskan trappers and dream of wild lonely places, adventure and riches. However, growing up on the outskirts of St. Louis didn't provide an environment conducive to those dreams. I thought that learning to trap would be expensive and complicated, and I had questions about the humaneness of the sport.

I began my voyage into the world of fur trapping in 2003 when I signed up for a class called Trapping in Today's World sponsored by the Conservation Department.

As an agriculture teacher, I attend in-service activities to learn new material for the conservation class I teach in Camdenton. The trapping class was held during the National Trappers Convention in Columbia. I watched demonstrations, visited with vendors, took notes and asked a lot of questions. I left the convention with three traps, a second-hand fleshing beam, some castor lure and high hopes.

During my first trapping season, there was a lot to learn. Whether you're a would-be trapper, or merely curious, I hope my experiences help you to better understand the world of fur trapping.

## LESSON 1

### BIG WORK, LITTLE PAY

My dream of easy riches quickly faded in my first season of trapping. Dragging a sled with 30 pounds of equipment and a 45-pound beaver reminded me more of football practice than a leisure activity.

Everything about trapping seemed like work at first, walking a creek in waders, climbing up and down river banks, making sets. It was a great way to stay in shape and shed a few of those holiday pounds.

The first time I sold my furs I was paid \$9 for each beaver pelt. It was more than a little discouraging after spending so many hours trap-

ping, hauling, skinning, scraping and stretching them. I had to remind myself that I was not only richer, but also happier and healthier for the experience. Later, I was able to sell beaver pelts for substantially more money as I gained experience and skill.

## LESSON 2

### A GLOBAL ENTERPRISE

I was fascinated by how much of the fur market had nothing to do with Missouri or even the United States. I never thought about how the Russian winter or the economy in Greece would affect prices for Missouri furs.

Fur was one of the main reasons for the exploration of our continent, if not the globe. Prior to synthetic materials, fur was the best way for people to keep warm. In some parts of the world, it still is. I liked the idea that my furs could end up anywhere—Chinese soldiers might be wearing the otter fur that I caught in Missouri.

There is also a downside to a global fur market. Just as in the early 1800s when silk displaced fur in the hat trade, causing the fur market to crash, today's fashions are just as fickle. One season furs will be valuable, the next season they won't. There aren't any uncharted fur fields anymore but the fur trade is as global in scope as it ever was.

## LESSON 3

### PROCESSING FURS

I found this to be one of the most difficult but rewarding aspects of trapping. Most trappers today sell their fur "green" or still frozen to buyers. Furs are sold this way because fleshing and drying hides can be time consuming and labor intensive. Also, if done improperly it can devalue your furs.

Fur handling is fast becoming a lost art, and I take a lot of pride in having learned to do it well. The first beaver pelts I processed took me four hours and rubbed blisters on my hands. For all that, I still managed to cut several holes in them. After several hides, I got the hang of it and it

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**Jeff Kitchen teaches his son the basics of setting a trap. To be successful at trapping, one must study the animals' habits and habitats closely.**









**Jeff Kitchen (left) and fellow trapper Dallas Stamper (right) examine their furs in Stamper's fur shed, an abandoned store from the 1930s. They are discussing how the blemish on this skin will slightly downgrade its value at auction.**

helped me sell my pelts for higher prices. As I gained skill, I actually became more interested in how my furs graded than the price I received for them.

There is something primitive and appealing in stretching and preserving hides for the fur trade. It allowed me to develop an ancient skill and connect with the past in a way that a trip to a museum never could.

## LESSON 4

**UNDERSTANDING ANIMAL BEHAVIOR** Although I have hunted and fished for years, I have never connected with nature as I have with fur trapping. To be successful, you must study the animals' habits and habitats closely.

Trapping forced me to get down in the water and examine every square foot of riverbank for tracks, scat or other sign. Sometimes a small stick or a clump of grass would determine where an animal was going to place its foot or stick its head.

I was amazed at how many furbearers roamed the woods at night. These animals are rarely seen by people, except perhaps a fleeting glimpse in passing headlights. Missouri furbearers are much more abundant than most people realize.

## LESSON 5

### ANIMAL WELFARE

At first, I wasn't sure how I felt about capturing animals for their fur. When I hunt, I always try for the quickest, most humane kill possible. I was impressed to learn that modern traps have improved designs to enhance animal welfare.

Some traps today have padded rubber jaws, others have jaws that are extra wide or do not close completely to allow a looser grip and better circulation. Some modern traps kill the animal quickly by striking it behind the head, much like a giant mousetrap. It is in the interest of the trapper to cause the least amount of stress and pain to the captured animal. Any excess stress





Sara, Jeff Kitchen's 13-year-old daughter, is fleshing a raccoon hide. Fleshing is the part of the tanning process that makes leather soft, pliable and weather resistant. Fur trapping is a unique sport that results in harvesting a commercially valuable renewable resource.

caused to the animal will lower the quality of the pelt and affect the price the trapper receives for the fur.

Trappers strive to dispatch animals as quickly and painlessly as possible. I have learned firsthand that trapping can be done humanely.

## LESSON 6

### BEAVERS ARE BRUTES

I guess it makes sense that a critter that eats trees for breakfast, lunch and dinner would be one of the toughest animals the woods. Beavers have no natural predators, and it is easy to see why. They are equipped with 3-inch-long chisel-sharp teeth on the business end of a stump-like body of solid muscle.

Making a beaver set often involves chopping wood, scooping mud and hammering stakes—all in ice-cold water. Furthermore, the traps used for beavers are big, heavy and powerful. Even carrying a beaver out of the woods is tough. The biggest beaver I caught my first year

was 53 pounds. I suggest that a beginner start with muskrat or raccoon trapping and graduate to beavers if you want more of a challenge.

## LESSON 7

### FEW YOUNG TRAPPERS

Through the Missouri Trappers Association, I met men with names like "Griz" and "Bug." They seemed every bit as tough and colorful as the mountain men who settled the West must have been. Apparently, it takes something serious to keep these guys from trapping. They are also serious about helping kids.

A fur buyer in Lebanon offered to buy my students' furs at a premium, in spite of market conditions, just to encourage them to trap. At an MTA auction an auctioneer appealed to the buyers to raise their bids when he realized my kids were involved in the project. Afterward, I joked with my children that we were starting the Kitchen Fur Company. They took me literally and believed we had begun a real business with real profits. From that day on we checked traps together and split the "profits" three ways.

It has been six years since my first trapping season. Each year I have learned more about trapping and more about Missouri furbearers. I now tan hides, and I have added to my trap line. I teach an extensive trapping unit as part of my conservation class each year.

One might wonder after reading this why anyone would choose to trap. Fur trapping is a unique sport that results in harvesting a commercially valuable renewable resource from nature. Though it's not likely you'll be able to make a living off the land in this way, it can add a little income and a lot of enjoyment to your outdoor adventures.

If you do decide to try fur trapping, learn as much as possible before you ever set your first trap. Use modern equipment, ethical practices and humane techniques. Add a different dimension to your outdoor experience, and don't forget to bring a kid along! ▲

Learn more about trapping through the Department's Web site at [www.MissouriConservation.org/7616](http://www.MissouriConservation.org/7616) or the Missouri Trappers Association at [www.MissouriTrappersAssociation.org](http://www.MissouriTrappersAssociation.org).



This summary of the Annual Report highlights the Missouri Department of Conservation's accomplishments and expenditures from July 1, 2008, through June 30, 2009. These accomplishments are based on the nine goals established in *The Next Generation of Conservation*.



## PLANTS & ANIMALS

### *Quail and grassland bird habitat*

In FY09 we completed about 103,000 acres of quail and grassland bird habitat work on conservation areas throughout the state. On conservation areas designated as Quail Emphasis Areas, more than 19,000 acres of quail and grassland bird habitat was completed. In addition, we have established 34 private-land quail focus areas throughout the state in places where landowners are managing their property for quail.

### *Natural communities*

At the end of FY09 there were 181 natural areas totaling 70,677 acres. These areas represent the best examples of healthy natural communities within the state.

### *Endangered species*

Three species were removed from the state endangered-species list because they were no longer threatened with extinction: bald eagle, barn owl and Western fox snake.

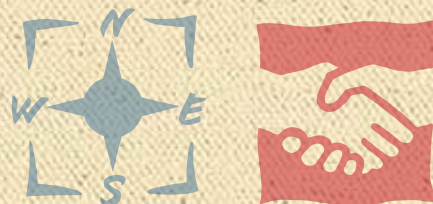
## CLEAN WATER

### *Taum Sauk Dam research and monitoring*

MDC evaluated aquatic habitat availability and monitored water quality in the East Fork Black River. This work was



# Annual Report



FISCAL YEAR 2008-2009



MISSOURI  
DEPARTMENT of  
CONSERVATION





conducted in preparation for the Federal Energy Regulatory Commission's relicensing of the Taum Sauk Pumped Storage Project. The information will be used to understand and minimize the potential effects of Taum Sauk Project operation on the aquatic life of the East Fork Black River.

#### ***Stream Team celebrates 20 years***

The Missouri Stream Team Program celebrated a 20th birthday and signed on its 4,000th team. Last year volunteers spent 137,488 hours working on their adopted streams.

#### ***Stream Stewardship Trust Fund***

The Stream Stewardship Trust Fund is available to restore, enhance and/or protect stream systems and associated riparian habitats. The Missouri Conservation Heritage Foundation administers the program and funds, and MDC applies for grants. In FY09, 15 projects costing \$1.1 million were approved to protect 83.2 acres of stream channel and 615.8 acres of riparian corridor.



## COMMUNITY CONSERVATION

#### ***Volunteer fire departments***

MDC, in cooperation with the U.S. Forest Service, provided \$381,886 in grants to 178 volunteer fire departments. These grants help fund protective clothing, equipment and training. We also provided equipment to fire departments through two federal programs. With the Federal Excess Property Program, we obtained equipment valued at \$316,695. The new Fire Fighter Program obtained equipment valued at \$11,591,225.

#### ***Community Assistance***

Through the Community Assistance Program and the closely related Corporate and Agency Partnership Program, MDC enters into agreements (usually 25-year) with cities, counties, state and federal agencies, businesses, foundations, schools and colleges. Under these agreements, MDC provides fisheries management at existing lakes and ponds, and cooperatively develops and maintains facilities for anglers and boaters at lake and stream areas. MDC has agreements with 116 partners for the cooperative management of 166 public lakes, 42 stream access areas, four lake access areas and six aquatic resource education ponds.

#### ***Venison donation***

MDC coordinates the Share the Harvest program with the Conservation Federation of Missouri, local charitable organizations and local meat processors. During FY09, 4,465 hunters donated 249,156 pounds of venison.



## HEALTHY FORESTS

#### ***Wildfire prevention***

By way of endorsing a third-party U.S. Forest Service Hazard Mitigation grant to the Southwest Resource Conservation and Development Program, MDC supported a two-year effort beginning in FY08 to promote wildfire prevention in southwestern Missouri. This area was hit severely by the January 2007 ice storm, and the resulting heavy, woody debris in the forests makes wildfire suppression more difficult and hazardous to firefighters.

#### ***Forest health***

The Forest Health Program is a cooperative effort among MDC and other state and federal agencies to conserve Missouri's forest resources by monitoring and evaluating forest health and providing forest-health management information to Missouri residents. Monitoring activities document and evaluate ongoing threats to forest health.

#### ***Timber harvesters***

The Missouri Forest Products Association and MDC jointly sponsor logger training courses aimed at educating loggers about forest-management principles, introducing new techniques and concepts, and enhancing the safety of timber-harvesting operations. Thus far, 308 loggers have been through the program in Missouri.



## OUTDOOR RECREATION

#### ***New hunters and anglers***

We provided more than 2,400 programs with instruction in hunting, fishing, trapping and shooting sports. More than 126,000 people took part in these programs. We offered about 900 Hunter Education classes, certified 24,733 students and began an online Hunter Education training module. More than 130,000 visitors attended programs or practiced firearms and archery shooting at our five staffed ranges.

#### ***Missouri National Archery in the Schools Program***

MDC—in collaboration with the Conservation Federation of Missouri—is the Missouri coordinating agency for the NASP. In FY09, 13,776 students from 82 schools experienced this international-style target-archery program taught in fourth- to 12th-grade physical education classes.

#### ***Urban fishing***

In FY09, more than 60 urban lakes were managed for fishing. More than 158,000 keeper-sized fish were stocked in these



lakes; this included almost 97,000 channel catfish, more than 46,000 rainbow trout and 15,000 brown trout.



## CONSERVATION EDUCATION

### ***Discover Nature—Schools***

More than 30,600 Missouri children were connected with nature through Discover Nature—Schools instructional units and grants. The middle school aquatic unit was adopted by 72 schools. The elementary unit, Nature Unleashed, was piloted by 21 schools. Grants supporting the two school units totaled \$114,000. Conservation field trip grants helped 20,273 students get outdoors. Outdoor classroom grants were awarded to 34 schools. Conservation grants to schools exceeded \$238,500.

### ***Citizens enjoying nature***

About 900,000 visitors explored the trails, programs and exhibits at our conservation nature centers and education centers throughout the state.

### ***Grow Native!***

Grow Native! is a program of the Missouri departments of Conservation and Agriculture, with help from the Missouri Botanical Garden's Shaw Nature Reserve. A focus in FY09 has been the education of civil engineers and contractors in St. Louis, where an emphasis is being placed on the ability of native plants to slow stormwater runoff and improve water quality. Also, a survey shows sales of native plants in Missouri increased 70 percent between 2003 and 2008.



## LANDOWNER ASSISTANCE

### ***Financial assistance***

Nearly \$1 million in cost-share funds went to 523 private landowners to implement beneficial habitat management practices for fish, forest and wildlife resources. The funds helped install 921 individual conservation practices, impacting nearly 12,000 acres.

### ***Technical assistance***

MDC provided timely and responsive service through 63,986 rural and urban landowner contacts, including more than 16,171 on-site visits. We also answered 4,488 requests for wildlife nuisance assistance, including 1,038 on-site visits.

### ***Partnerships***

We developed about 35 partnerships with federal, state and non-governmental organizations. These relationships helped

MDC enhance technical, financial and equipment support to landowners interested in improving fish, forest and wildlife. For example, MDC assisted Missouri USDA with developing and applying \$150 million in Farm Bill conservation programs, including more than \$2 million in staff time.



## PLACES TO GO

### ***Forest and woodland improvements***

We conducted forest and woodland habitat improvement on 21,078 acres of state land. This included thinning young trees on 3,052 acres, post-sale work on 1,048 acres, prescribed fires on 10,922 acres and harvest of 6,056 acres.

### ***Land management***

MDC conducted habitat management on approximately 187,000 acres of public land, with an additional 120 miles of edge habitat. We spent nearly 460,000 hours on area and equipment maintenance.

### ***Adopt-A-Trail***

Volunteers monitored, maintained and helped to enhance trails. In FY09, 44 volunteers or groups of volunteers reported spending 1,130 hours on conservation area trails.

## ACCOUNTING FOR DEPARTMENT OPERATIONS

### ***Listened to Missourians***

We conduct a variety of scientifically sound, unbiased and representative efforts each year to understand public opinions, expectations and recreation participation. This information guides decisions about regulations and fish, forest and wildlife management. In FY09 there were 62 activities that involved 87,226 people. These included public surveys, focus groups, public meetings and ombudsman contacts.

### ***Internal audit reports***

Internal auditors issued six internal audits to ensure that public funds were expended in a responsible manner. There were no major findings.

### ***Strategic plan accomplishments***

FY09 was the third year of tracking accomplishments of The Next Generation of Conservation, MDC's strategic plan. The plan identifies nine goals, 28 results we want to achieve and 61 specific actions. For each of the action items, performance measures and staff responsible for reporting are identified.



# What the Money Bought—Fiscal Year 2009

**County Assistance Payments—\$1,453,573** Included payments to Missouri's counties for levee and drainage district taxes, forest cropland payments, payments in lieu of real estate taxes and county aid road trust payments. Since 1980, more than \$13.79 million has been paid to Missouri counties in lieu of real estate taxes.

**Capital Improvements—\$21,777,980** Work included fish hatchery improvements, river access development, wetland renovations, shooting range construction, nature center improvements, land acquisition transactions and renovation and repair of facilities statewide.

**Fisheries—\$12,563,006** Maintained and improved sport fish populations, aquatic biodiversity and aquatic habitats. Managed 902 impoundments and stream areas for public fishing, and provided stream and lake management assistance to almost 8,600 private landowners. Stocked approximately 5 million fish in public lakes and streams.

**Forestry—\$16,051,758** Fostered a healthy and growing forest resource. Examples include distributing about 4.5 million seedlings for planting to nearly 12,000 landowners, provided forestry assistance on more than 100,000 acres and facilitated EQIP projects totaling more than \$725,000 on private land, managing 438,700 acres of public forest land, monitoring insect and disease threats and facilitating development of the state's forest industry.

**Wildlife—\$16,338,979** Worked toward ensuring wildlife populations are in harmony with habitat and human enjoyment. Managed more than 525,000 acres of public land and implemented programs to maintain and restore natural communities and wildlife diversity across Missouri's landscape.

**Outreach and Education—\$15,186,325** Sustained Missourians' connection to the outdoors through more than 1 million visitors to conservation nature centers and shooting-range/outdoor-education centers, nearly 500,000 subscribers to the *Missouri Conservationist* magazine, Web-based information, grants to schools exceeding \$238,500, conservation curriculums for schools, outdoor skills programs and hunter education.

**Private Land Services—\$7,630,877** Helped private landowners to achieve long-term natural resource conservation objectives. Provided service through 63,986 rural and urban landowner contacts; affected 327,181 acres through technical assistance to landowners; provided habitat management workshops to 34,959 attendees; assisted USDA with enrolling 14,000 acres in the Conservation Reserve Program SAFE practice; and assisted 4,488 private landowners in controlling nuisance wildlife.

**Protection—\$13,505,810** Paid for law enforcement in every county as well as resource management, information, education and public service contact activities conducted by conservation agents who directly contacted more than 675,000 people. Coordinated the Share the Harvest Program where close to 5,000 deer hunters donated 249,156 pounds of venison to less fortunate Missourians. Conservation agents, along with 1,788 volunteer instructors, conducted 937 hunter education classes, certifying nearly 25,000 students.

**Resource Science—\$11,392,711** Provided the science-based information needed to effectively manage Missouri's natural resources. Resource Science monitors the status of Missouri's fish, forests, plants and wildlife, recommends conservation actions, evaluates these actions and reports the results. In addition to surveys of fish and wildlife, tens of thousands of Missourians were contacted to determine their outdoor activities and opinions about conservation programs.

**Regional Public Contact Offices—\$3,583,989** Provided regional public contact offices.

**Administrative Services and Human Resources—\$30,661,827** Paid for human resources, federal reimbursement administration, hunting and fishing permit point-of-sale system, fiscal services, distribution center, print shop, fleet management, vehicle and equipment maintenance centers and information management and technology. Also includes other agency appropriations, Department-wide equipment and other essential services.

**Design and Development—\$12,134,219** Provided engineering, architectural, surveying and construction services for conservation programs and maintenance of conservation areas and facilities.

**Administration—\$3,349,974** Paid for audits, legal counsel and the coordination of strategic planning, environmental policy development, cultural resource reviews, public involvement and river basin management.

## RECEIPTS

Conservation Sales Tax .....	\$96,571,218
Permit Sales .....	\$32,056,614
Federal Reimbursements .....	\$24,165,283
Sales and Rentals .....	\$8,601,439
Other Sources .....	\$6,530,587
Interest .....	\$1,049,928
Total Receipts .....	\$168,975,069

## DISBURSEMENTS

County Assistance Payments .....	0.88%
Capital Improvements .....	13.15%
Fisheries .....	7.58%
Forestry .....	9.69%
Wildlife .....	9.87%
Outreach and Education .....	9.17%
Private Land Services .....	4.61%
Protection .....	8.15%
Resource Science .....	6.88%
Regional Public Contact Offices .....	2.16%
Administrative Services & Human Resources .....	18.51%
Design and Development .....	7.33%
Administration .....	2.02%

## MISSOURI STATE BUDGET

Health & Social Services .....	37.8%
Education .....	27.3%
Government Services .....	21.2%
Transportation .....	10.2%
Natural & Economic Resources .....	2.9%
Conservation .....	0.6%
<i>MDC represents less than 1% of the total state budget</i>	
Total State Budget .....	\$24,014,896,988



## Bunny on the Run

*Winter is no time to stay inside when great fun is to be had rabbit hunting on conservation areas.*

A SCATTER OF fur at the Scrivner Road Conservation Area was mute evidence that a predator had passed that way, maybe a fox or coyote or possibly someone armed with a beagle and a shooting iron. My bird dogs showed great interest in the rabbit aroma, but we had a discussion about it. It recalled a quail hunt on the Robert White CA north of Mexico. My Brittany locked up. I stepped in front of him and a rabbit bolted, and I turned to explain the difference between winged creatures and furred ones ... and a huge covey of quail erupted behind me. I wished for a beagle at that moment. ...

Rabbit season and Missourians go together like sorghum 'lasses and cornbread (and actually 'lasses & cornbread goes very well with rabbit stew, too). Most Department conservation areas sport rabbits as fair game. North Missouri's many areas (see the Department's Conservation Atlas [www.MissouriConservation.org/2930](http://www.MissouriConservation.org/2930)) probably hold more cottontails than the more heavily forested Ozark areas, but it'll be a rare public area that does not have them. The west and southwest prairie region also is cottontail country.

The season is long, from Oct. 1 through Feb. 15, and the bag limit is liberal at six daily, 12 in possession for cottontails; two and four for swamp rabbits. Cottontail rabbits once were so numerous they were commercially trapped; now they are strictly a game animal. Some opt to still hunt, hoping to start a rabbit. The best idea is to walk, stop, walk, stop. The hesitations often spook a jittery bunny into flight. Others wait for a snow and track rabbits to their hides. But of all the methods, running rabbits with a beagle is not only the easiest, but the most productive (and, dedicated hound hunters will tell you, the most fun).

While a coyote may run a straight line to the next state, and raccoons and foxes cover huge chunks of real estate, a rabbit usually runs a circular route. Meaning that if you jump it at point A, it will take the baying beagle on a leisurely stroll, ultimately returning to point A, where you wait with a loaded gun and a smile. The gun can be either a shotgun or a bullet gun (rifle or pistol). Obviously a shotgun is more certain on a running bunny, but deposits several to many pellets. The single projectile is deadly but harder to place in a fleeing rabbit. Beagles are plodders. They scent-hunt and usually are far behind the rabbit, unlike a greyhound, which sight hunts and runs the prey down. Some Missourians opt for a bow or crossbow, and a few hunt with falcons—usually a dog to start the bunny and a raptor to finish it. Regardless of the method, rabbits remain a staple of the Missouri hunter's season. When deer and turkeys were virtually extirpated from the Show-Me State, rabbits thrived and every rural kid learned to hunt them for the family pot. Then it was necessity; now it's just pure fun.

—Joel M. Vance, photo by David Stonner

Youth rabbit hunt.

### For More Information

To learn more about hunting in Missouri, visit [www.MissouriConservation.org/7604](http://www.MissouriConservation.org/7604).









## Ozark Zigzag Salamander

*These cool, mysterious amphibians come in a variety of colors, but they can be hard to spot.*

NO ONE KNEW where Ozark zigzag salamanders (*Plethodon angusticlavius* Grobman) went in the summer, or where they laid their eggs. There were theories, of course, but all based on the behavior of other salamanders. Then, on July 7, 1999, Department Herpetologist Jeff Briggler and Biologist William L. Puckette stumbled onto a group of brooding females and other adult salamanders in a small cave in the Arkansas Ozarks. They continued their study of the site for the next two years in order to learn more about the reproductive biology and natural history of the species.

Zigzag salamanders are known to thrive in cooler and wetter areas than other salamanders, and they remain on the ground nearly until winter. They are found only in the Ozarks, where they inhabit the caves of the Central Highlands or nearby areas, under rocks and leaf litter, near small streams and on steep hillsides. They are found in the south and southwestern portion of the Missouri Ozarks. Until Briggler and Puckette's discovery, it had only been theorized that these cold-adapted salamanders retreated deeper into the earth during warmer months, to both escape the heat and produce their young.

The brooding females were discovered in tiny crevices in the cave's walls, where they were laying tiny clusters of two to eight eggs. The eggs were attached to a central stalk that hung, grape-like, from the roof of each hole in the rock. The females then curled themselves around these stalks in order to defend them from predators—including the other salamanders. When disturbed by the scientists, the females reacted aggressively, with lunges and bites. All of the eggs were deposited by late June to early July and hatching concluded by the beginning of September. Unlike some salamanders, the zigzag does not lay eggs in water, so the young complete their larval phase within the egg, hatching as fully-formed, miniature adults after an incubation period of 65 to 70 days.

Adult zigzags are among the smallest of the salamanders, reaching a length of only 2½ to 3½ inches. Males and females are difficult to tell apart, but males are usually smaller and more slender. Individuals may be red-striped, yellow-striped, or unstriped, also known as “leadback.” Interestingly, hatchling colors typically do not match those of their mothers. The zigzag, along with other members of the Plethodontid group, do not have lungs; oxygen is absorbed through their skin and mucous membrane of the mouth. Both genders have 17 to 19 “costal grooves,” vertical indentations along the sides of their bodies. These grooves help distribute moisture across the salamander's skin, which improves their ability to take in oxygen and regulate their temperature.

The zigzag's prey consists of tiny arthropods. Mammals, birds, reptiles and even other amphibians may feed on the zigzag, given the chance.

—Nichole LeClair Terrill, photo by Jeff Briggler

### For More Information

To learn more about salamanders, watch this video at [www.MissouriConservation.org/21330](http://www.MissouriConservation.org/21330).









## Mussel Fork CA

*Outdoor recreation options abound all year-round at this north central conservation area.*



TEN MILES EAST of Brookfield on the south side of Highway 36, Mussel Fork Conservation Area fronts about two miles of Mussel Fork Creek. With a wide range of habitat types covering more than 2,000 acres, the area serves as habitat for hundreds of native Missouri plants and wildlife species, and offers plenty of outdoor recre-

ational opportunities throughout the year.

Visitors will appreciate the area's landscape for its diversity and beauty. Southward-draining, closely spaced streams create a pattern of long, narrow ridges and wooded stream valleys. Before settlement, this rolling landscape included oak savannas on the ridges and more densely forested areas along the steeper slopes. Lowlands next to Mussel Fork Creek were prone to flooding and included a complex pattern of wet prairie, marshes, small lakes and ponds and riverbank timber. These natural communities were home to a wide diversity of plants and animals.

Today the area's managers are restoring ecosystem processes, such as prescribed fire, that create a diverse prairie-savanna-woodland mosaic, much like that of the historic landscape. Prescribed fire cleans out encroaching saplings, removes leaf and woody litter and stimulates plant growth, resulting in a rich ground flora of wildflowers, grasses and sedges. The area's well-managed woodlands provide excellent habitat for wildlife, including white-tailed deer, wild turkey, bobwhite quail, red-headed woodpecker, Coopers' hawk, Indiana bat, three-toed box turtle and eastern grey treefrog.

In January, several hunting seasons are open, including furbearer, rabbit, squirrel and crow. Trapping is allowed by special permit only. Visitors to the area may also pursue deer with bow and arrow, or hunt quail through January 15. Antlered or antlerless deer may be taken on an Archer's Hunting Permit; however, no archery antlerless permits may be used.

Area ponds offer winter fishing opportunities for bass, catfish and bluegill. Hiking and birdwatching are also great winter activities, particularly after a snow event, when tracks and other wildlife signs can be seen and identified. On a sunny day after a fresh snowfall, quail, turkey, sparrows, chickadees, titmice and woodpeckers will flock to foodplots and other open fields to forage and sun themselves.

—Bonnie Chasteen, photo by Noppadol Paothong

**Photo right:** Red-headed woodpecker

**Recreation opportunities:** Birdwatching and wildlife viewing, primitive camping, fishing, hiking on mowed service roads and hunting for deer, quail, rabbit, squirrel and turkey

**Unique features:** Two miles of Mussel Fork Creek and four fishable ponds

### For More Information

Call 660-646-6122 or visit [www.MissouriConservation.org/a8422](http://www.MissouriConservation.org/a8422).









## Hunting and Fishing Calendar

### FISHING

#### OPEN CLOSE

Black Bass (certain Ozark streams, see the *Wildlife Code*)

5/23/09 2/28/10

impoundments and other streams year-round

Gigging Nongame Fish

9/15/09 1/31/10

Trout Parks Catch and Release

11/13/09 2/8/10

Friday—Monday at Bennett Spring, Montauk and Roaring River  
and daily at Maramec Springs

### HUNTING

#### OPEN CLOSE

Coyotes

5/11/09 3/31/10

Crow

11/1/09 3/3/10

Deer

Firearms

Youth

1/2/10 1/3/10

Archery

11/25/09 1/15/10

Furbearers

11/15/09 1/31/10

Pheasant

North Zone

11/1/09 1/15/10

Quail

11/1/09 1/15/10

Rabbits

10/1/09 2/15/10

Ruffed grouse

10/15/09 1/15/10

Squirrels

5/23/09 2/15/10

Turkey

Archery

11/25/09 1/15/10

Waterfowl

please see the *Waterfowl Hunting Digest* or  
see [www.missouriconservation.org/7573](http://www.missouriconservation.org/7573)

### TRAPPING

#### OPEN CLOSE

Beaver & Nutria

11/15/09 3/31/10

Furbearers

11/15/09 1/31/10

Otter & Muskrats

11/15/09 see *Wildlife Code*

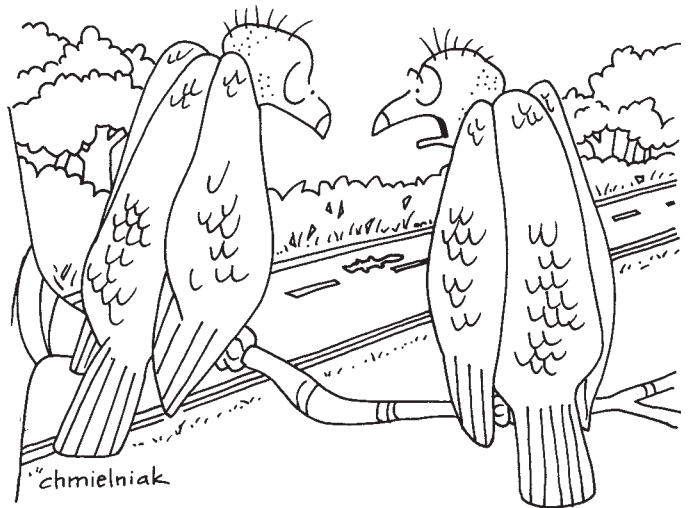
For complete information about seasons, limits, methods and restrictions, consult the *Wildlife Code* and the current summaries of *Missouri Hunting and Trapping Regulations* and *Missouri Fishing Regulations*, the *Fall Deer and Turkey Hunting Regulations and Information*, the *Waterfowl Hunting Digest* and the *Migratory Bird Hunting Digest*. For more information visit [www.MissouriConservation.org/8707](http://www.MissouriConservation.org/8707) or permit vendors.

The Department of Conservation's computerized point-of-sale system allows you to purchase or replace your permits through local vendors or by phone. The toll-free number is 800-392-4115. Allow 10 days for delivery of telephone purchases. To purchase permits online go to [www.wildlifelicense.com/mo/](http://www.wildlifelicense.com/mo/).



## OPERATION GAME THIEF

1-800-392-1111



"What I really have an appetite for is pie and ice cream."

## OPERATION FOREST ARSON

If you see or learn of someone deliberately  
setting a fire, please dial toll-free:

# 1-800-392-1111

## Contributors

JEFF KITCHEN is an agricultural education instructor at the Lake Career and Technical Center in Camdenton. He, his wife, Jennifer, and their three children live on beautiful Lake of the Ozarks. Jeff has taught school for 17 years. He is also an FFA advisor, certified arborist, horticulturist and amateur botanist.



Nature photographer DAVID STONNER lives in Jefferson City with his wife, Angela, daughter, Maggie, and son, Sam. Since joining the Department of Conservation in 2007, he has made his favorite photographs while on the beautiful trails of southern Missouri, where he backpacks every chance he can get.



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Co-sponsored by the Missouri Department of Conservation and University of Missouri Extension, the Master Naturalist™ program helps you become a well-informed community leader dedicated to improving natural resources.

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Spring training starts in February and March in Columbia, Cole Camp, Camdenton and Joplin. Cost for the training varies by chapter. Visit [www.monaturalist.org](http://www.monaturalist.org) for more information.

## WHAT IS IT?

### Bison

On the back cover and right is a bison at Prairie State Park in Barton County by Noppadol Paothong. A small herd of about 100 bison live at the park. The bison were reintroduced but are considered a wild herd that freely grazes across the park. They reproduce naturally, and calves are born in May and June. Prairie State Park is Missouri's largest remaining tallgrass prairie landscape. To learn more about tallgrass prairies in Missouri, visit [www.MissouriConservation.org/conmag/2005/10/50.htm](http://www.MissouriConservation.org/conmag/2005/10/50.htm).



## AGENT NOTES

### *Traditional tools for modern day issues*

I DIDN'T KNOW the first thing about trapping before becoming a conservation agent. What I knew about trapping came from watching movies or walking through a theme park's leather shop.

From day one as a conservation agent, I began recognizing the great number of animals that live around us (especially in metro areas), and the tremendous skills trappers need to catch the animals. Almost immediately, I began receiving calls from homeowners, farmers, ground-skeepers and gardeners who felt frustrated, even helpless, in

controlling the damage some of these animals caused.

As time has gone by, I have learned a few tricks about dealing with raccoons in chimneys, skunks under porches, squirrels in attics, groundhogs under sidewalks and beavers damming up drainage ditches. I took the opportunity to educate myself on some basic trapping techniques. In fact, I have even begun trapping beavers and muskrats as a hobby on some lakes and subdivision ponds near my home. These homeowners get so frustrated when they lose a 50-year-old ornamental tree from their backyard overnight that they beg me to come back each year.

The more I trap, the more I understand the value of these historic and nearly forgotten skills. Modern trapping is a reputable and valuable wildlife management tool that deserves great respect.

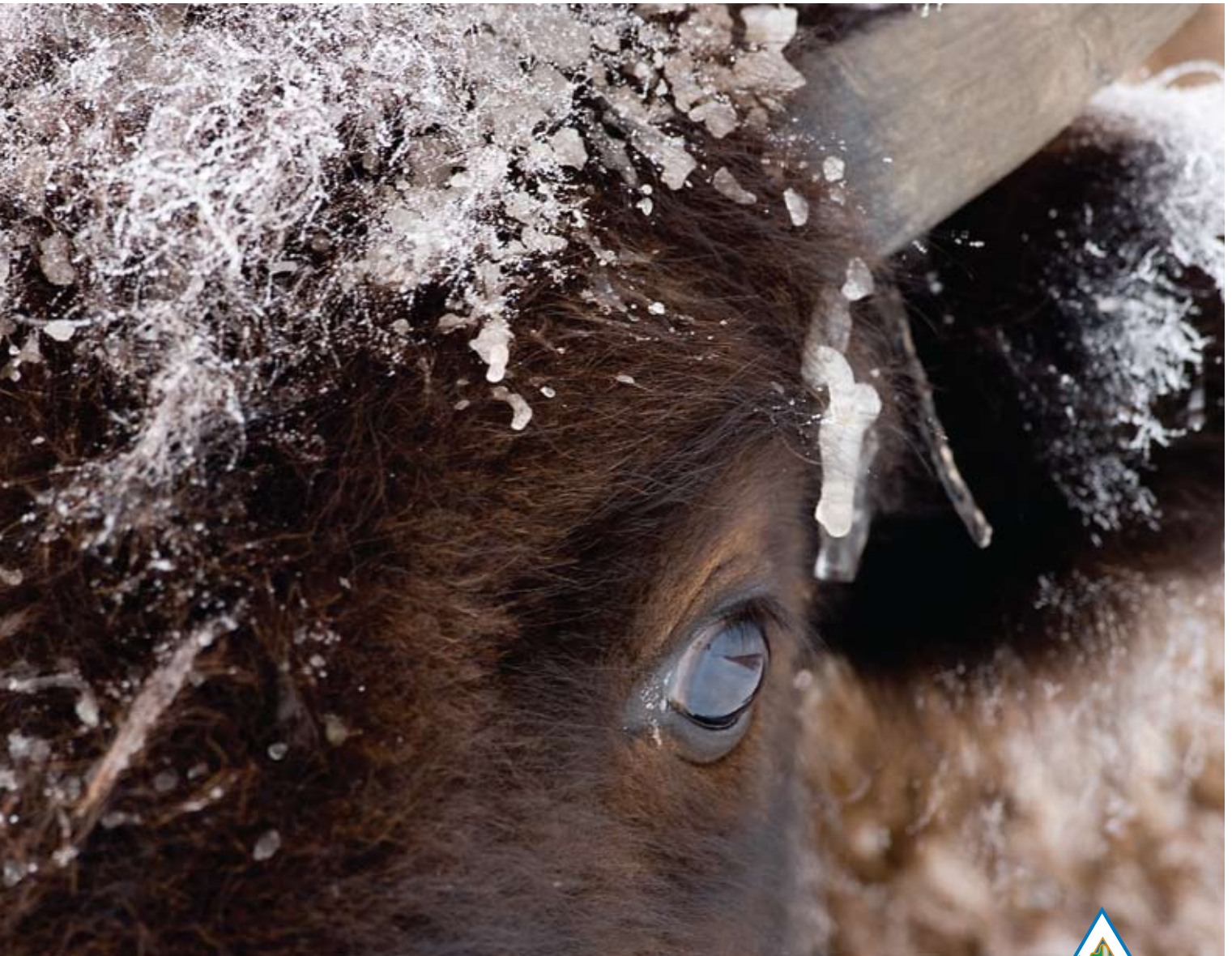


Scott Rice is the Protection district supervisor for the Central Region. If you would like to contact the agent for your county, phone your regional Conservation office listed on Page 3.



# WHAT IS IT?

Our photographers have been busy exploring the intricacies of the Missouri outdoors. See if you can guess this month's natural wonder. The answer is revealed on the inside of this back cover.



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